Introduction v.1.0 (no literature yet)

Historically speaking, community and sharing are ideas and processes which almost always seem to go hand in hand. Apparently, in today's highly globalized, urbanized, digitilized capitalocentric world characterized by constant population movement it is hard to define what a community is and what its characteristics are. However, especially during the last decade, amidst the blatant climate and resource crisis, capitalism's constant failures and lost promises, in order to improve the use of resources and adjust to the so called 'smaller states' and public funding cuts, reinvigorating local communities, boosting participation, sharing and fostering resilience appear more and more as exceptionally desirable and needful practices and aims in various contexts.

From designing, sustaining and managing public infrastructures and assets (e.g. parks, squares, local neighborhood infrastructures) to the sharing of traditionally seen as more private resources (e.g. vehicles, tools, appliances, food, time and skills etc) and to more hybrid modalities where the private and the public intertwine (e.g. solidarity networks, community makerspaces, squats, self-organized community centers, community gardens, food-waste management initiatives, co-housing projects etc).

Not surprisingly, in today's highly digitalized world and with the aim to better support community building, community organizing and the sharing of resources, we notice a growing interest in the use of Web 2.0 digital technologies which have unprecedentedly changed the ways people connect to each other, collaborate and share information. Forums, mailing lists, social media platforms, project management software and resource-sharing platforms are some of the digital tools already in use.

This latter type, resource-sharing platforms which are also called collaborative consumption tools or sharing economy tools are ad hoc designed digital platforms/digital mediators that are developed at least on paper to support sharing practices, the establishment of new communities and the enhancement of existing ones. As all that glitters is not gold, a large number of those sharing economy platforms which are owned, designed and managed by few 'entrepreneurs' have been described as share-washing, community-washing, business as usual neoliberal projects that adopt such a terminology due to its affectionality and positive symbolic meaning only for branding reasons. In HCI and in other fields, we come across an extensive breadth of works, reports and accounts that justify such accusations which look into how such platforms are designed and managed, how they operate, monetize and exploit previously unmonetized sharing activities, what values they promote etc.

As technology being the mediator is not to blame per se but those that design, set the terms and benefit from this mediation, there fortunately also exist more genuine communities of sharers which in order to support their non-for-profit, occasionally solidarity-driven and caring-based activities, appropriate existing digital tools not designed for community-organizing, building and sharing per se (e.g. social media platforms), build their own ad hoc platforms or combine a more hybrid approach. In this work here, we mainly focus on these types of communities and the digital tools they use and develop.

Specifically, we report on our consistent participation in the sustainment and development of a digital tool called Karrot and our various engagements with the communities that can be found around its design, management and use. In short, Karrot is an open-source, community-run project that was initially designed in (?) to support food-waste saving and sharing initiatives and is currently redesigned to become a tool that can support other communities of sharers and initiatives accordingly. Karrot is not a typical sharing economy tool through which individuals as users organize the sharing of resources like AirBnB, Ollio or Blablacar but it is rather a project designed to support sharing and cooperation in its broader sense. Karrot focuses on groups rather than individuals, is a collectively designed and managed project, is a community organizing tool and a tool that can facilitate sharing activities.

As HCI researchers, we joined Karrot by late October 2020. In this process we have adopted a participatory action research approach that has been also imbued with design anthropology elements.

From our participation and research within Karrot, we found
that

Departing from our findings, in our discussion section while reflecting on a series of participatory design processes we have taken part in during our engagement with Karrot project we provide design implications for the collaborative development of community-driven digital tools and their management as digital commons. In addition, we discuss malleable digital platforms which as loose and adaptable architectures can support various contexts of sharing. Finally, reflecting on the participatory action research approach we adopted in the context of Karrot we comment on the role of institutions and the role of researchers when participating in projects of a similar ilk.

Abstract

Amidst the critics shaped against business as usual, highly centralised and profit-driven 'sharing economy' and the ever-growing clarion calls stemming from various fronts to experiment with and develop more sustainable, resilient and community-driven modes of collaborative consumption and sharing, in this work we report on our engagement as participatory action researchers, with the 'ecosystem(s)' of communities that use, sustain manage and design the community organising and sharing platform called Karrot.

Karrot is a FOSS project under constant development that is primarily used by foodsaving and sharing initiatives active in various places mainly around Europe.

Departing from our 'from the ground' exploration of the 'ecosystem(s)' that unfold around Karrot, with this work we participate in the 'sharing discourse' by submitting and suggesting ways towards the management and development of such tools as open-beyond-code, participatory and community-driven. Similarly, reflecting on the participatory action research approach we adopted we comment on the role of researchers like us when they decide to

join such projects and the role of external institutions in general (i.e. funding institutions, universities etc).

Introduction

- Few things about the values of sharing and history of sharing
- Few things about mainstream sharing economy
- And the digital as the mediator
- Research gap
 - Grassroots ad hoc projects
- In response...
- Karrot's ecosystem and few things about Karrot
- HFI (HCI) and Karrot
 - context of foodsharing/saving within HCI
- Methodology

What type of engagements What sort of data?
How data were used?

- Findings?
- Participate in the sharing discourse by...
 - Fafas
 - Fasfas
 - Fsafas
 - Fsa
 - Fas

Literature to check

- Ann Light and Yoko Akama. 2014. Structuring Future Social Relations: The Politics of Care in Participatory Practice. In Proceedings of the 13th Participatory Design Conference: Research Papers - Volume 1 (PDC '14). ACM, New York, NY, USA, 151--160. https://doi.org/10.1145/2661435.2661438
- Ann Light and Yoko Akama. 2017. The Nature of 'Obligation' in Doing Design with Communities: Participation, Politics and Care. In Tricky Design: The Ethics of Things. Bloomsbury, London
- 3. Andrew Schrock. 2018. Civic Tech: Making Technology Work for People. Rogue Academic Press, Long Beach, CA.
- 4. S. L. Star and A. Strauss. 2004. Layers of Silence, Arenas of Voice: The Ecology of Visible and Invisible Work. Computer Supported Cooperative Work (CSCW) (2004). https://doi.org/10.1023/A:1008651105359
- Maurizio Teli, Myriam Lewkowicz, Chiara Rossitto, and Susanne Bødker. 2021.
 Understanding, Promoting, and Designing for Sustainable Appropriation of Technologies

by Grassroots Communities. Towards a new wave of technological activism: Sustainable Appropriation of Technologies by Grassroots Communities. In C&T '21: Proceedings of the 10th International Conference on Communities & Technologies - Wicked Problems in the Age of Tech. ACM, Seattle WA USA, 332--335. https://doi.org/10.1145/3461564.3468163

6. Maurizio Teli, Mariacristina Sciannamblo, Marisa Cohn, and Peter Lyle. 2021. Caring and commoning as cooperative work: a case study. In Proceedings of the 24th ACM conference on computer supported cooperative work & social computing. Association for

Computing Machinery, New York, NY, USA

7.
Austin Toombs, Shad Gross, Shaowen Bardzell, and Jeffrey Bardzell. 2017. From empathy to care: a feminist care ethics perspective on long-term researcher--participant relations. Interacting with Computers 29, 1 (2017), 45--57. Publisher: OUP.

8. 9.

N	0	t۵	9

With this work, reflecting on our engagement with the ecosystem that unfolds around Karrot, we participate in the 'sharing discourse' by bringing to light the ways Karrot is developed as an ad hoc tool

In response to the identified research gap within HCI literature, indicating the need to engage with grassroots and self-organised communities that develop their own ad hoc collaborative and sharing economy tools in this work we reflect on our longitudinal participation and exploration of the ecosystem that unfolds around Karrot. In this way we participate in the 'sharing' discourse by providing design implications for the development of

Identifying a research gap within the HCI literature,

Within our aim to participate in the 'sharing' discourse and

with resource